

```
2-3 3-4 4-5 5-6

normalized bonds:
    7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems:
    containing 1: 7:

Match level:
    1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
```

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

1 2 3 4 5 6 7 8 9 10 11 12

ring bonds :

exact/norm bonds : 1-2 1-6 exact bonds :

12:Atom 13:CLASS

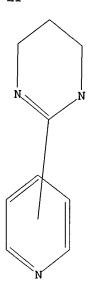
=>
Uploading 10009477 (species).str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam SAMPLE SEARCH INITIATED 11:39:59 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 19526 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 382174 TO 398866

PROJECTED ANSWERS: 3067 TO 4743

L2 10 SEA SSS SAM L1

=> Uploading 10009477 (species).str

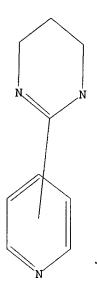
L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR

10 ANSWERS



Structure attributes must be viewed using STN Express guery preparation.

=> s 13 sss sam SAMPLE SEARCH INITIATED 11:41:11 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 8547 TO ITERATE

11.7% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

165404 TO 176476

PROJECTED ANSWERS:

0 TO

L4

0 SEA SSS SAM L3

Uploading 10009477 (species).str

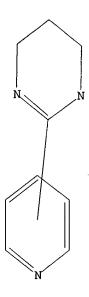
STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5

STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15 sss sam
SAMPLE SEARCH INITIATED 11:42:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 19526 TO ITERATE

5.1% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 382174 TO 398866
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s 15 sss ful FULL SEARCH INITIATED 11:42:30 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 396496 TO ITERATE

100.0% PROCESSED 396496 ITERATIONS 49 ANSWERS SEARCH TIME: 00.00.05

L7 49 SEA SSS FUL L5

=> s 17 L8 20 L7

=> d 18 1-20 bib, ab, hitstr

```
ANSWER 1 OF 20 CAPLUS COPYRIGHT 2002 ACS
L8
     2002:615577 CAPLUS
AN
     137:169536
DN
     Preparation of aryl-substituted tetrahydropyrimidines and related
TΙ
     compounds as melanocortin-4 receptor binding compounds
     Maguire, Martin P.; Dai, Mingshi; Vos, Tricia J.
IN
PA
     Millennium Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 228 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                              DATE
     PATENT NO.
                       KIND
                                              APPLICATION NO.
                                                                DATE
PΙ
     WO 2002062766
                        A2
                              20020815
                                              WO 2002-US3566
                                                                20020207
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
              TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-778468
                              20010207 - I have this case.
                        Α
OS
     MARPAT 137:169536
AΒ
     Title compds. I [wherein A and B = independently (un) substituted biaryl,
     (hetero)aryl, Ph, (cyclo)alkyl, (cyclo)alkoxy, alkenyl, alkynyl, OH,
     acyl(oxy), carbamoyl, amino, thiol, amidino, imino, NO2, N3, etc.; L1 and
     L2 =- covalent bond or (un) substituted alkyl optionally interrupted by O,
     S, or N; r = covalent bond, CH, CH2, CHR1, CR1R2, or H; t = CH, CH2, CHR3,
     CR3R4, or H; s = CHR5, CR5R6, or absent; R = H, (un) substituted alkyl,
     arylalkyl, or heteroalkyl, and may optionally be linked to A, B, L1, or
     L2; R1-R6 = independently (un) substituted alkyl, halo, thiol, thioether,
     thioalkyl, alkoxy, and may be optionally linked to each other to form
     addnl. ring moieties, e.g., quinoxalinyl; or pharmaceutically acceptable
     salts thereof] were prepd. as melanocortin-4 receptor binding (MC4-R)
     compds. For example, stirring a soln. of .alpha.-tolunitrile with
     diisopropylamine and BuLi in hexanes at -78.degree. under nitrogen for 1
     h, followed by addn. of HMPA and 1-chloromethylnaphthalene in THF,
     afforded 2-(2-naphthalen-1-ylethyl)benzonitrile. Heating the benzonitrile
     with 1,3-diaminopropane in the presence of H2S at 80.degree. for 72 h gave
     the tetrahydropyrimidinyl cycloaddn. product II. The latter exhibited
     exemplary inhibition of MC4-R in a scintillation proximity assay. I are
     useful for the treatment of disorders assocd. with pigmentation, bones, or
     wt. loss (no data).
IT
     325800-74-6P, 2-[2-(2-Methoxy-5-nitrobenzylsulfanyl)pyridin-3-yl]-
     1,4,5,6-tetrahydropyrimidine 325823-83-4P, 2-[3-(5-Bromo-2-
     methoxybenzylsulfanyl)pyridin-2-yl]-1,4,5,6-tetrahydropyrimidine
     326483-15-2P 447465-95-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
         (MC4-R binding compd.; prepn. of aryl-substituted tetrahydropyrimidines
        and related compds. as melanocortin-4 receptor binding compds. for
        treatment of pigmentation, bone, and wt. loss disorders)
```

RN

325800-74-6 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-[2-[[(2-methoxy-5-nitrophenyl)methyl]thio]-3-pyridinyl]- (9CI) (CA INDEX NAME)

RN 325823-83-4 CAPLUS
CN Pyrimidine 2-13-11/5-bromo-2-meth

CN Pyrimidine, 2-[3-[[(5-bromo-2-methoxyphenyl)methyl]thio]-2-pyridinyl]-1,4,5,6-tetrahydro-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & Br \\ \hline N & & S-CH_2 \\ \hline HN & N & OMe \\ \end{array}$$

RN 326483-15-2 CAPLUS

CN Formic acid, compd. with 1,4,5,6-tetrahydro-2-[6-[2-(1-naphthalenyl)ethoxy]-2-pyridinyl]pyrimidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 326483-14-1 CMF C21 H21 N3 O

CM 2

CRN 64-18-6 CMF C H2 O2

O = CH - OH

RN 447465-95-4 CAPLUS
CN Pyrimidine, 1,4,5,6-tetrahydro-2-[3-[[(2-methoxy-5-nitrophenyl)methyl]thio]-2-pyridinyl]-, monohydrobromide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NO}_2 \\ \\ \text{N} & \text{S-CH}_2 \\ \\ \text{HN} & \text{N} \end{array}$$

● HBr

```
L8 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2002 ACS
```

AN 2001:793434 CAPLUS

DN 135:339275

TI Cyclic amidines, nicotinic acetylcholine .alpha.4.beta.2 receptor activators containing them, and pharmaceuticals

IN Imoto, Masahiro; Iwanami, Tatsuya; Akabane, Minako; Tani, Yoshihiro

PA Suntory, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001302643	A2	20011031	JP 2000-120976	20000421
	WO 2001081334	A2	20011101	WO 2001-JP3378	20010420
	WO 2001081334	A3	20020808		

W: AU, CA, CN, KR, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRAI JP 2000-120976 A 20000421

OS MARPAT 135:339275

AB The activators, useful for treatment of brain function disorders, contain cyclic amidines I [A1, A2 = H, (un)substituted alkyl, (un)substituted aryl, (un)substituted heterocyclyl; X = (un)substituted C2H4, (un)substituted CH:CH, (un)substituted (CH2)3, (un)substituted CH2CH2NH] or their salts. Trimethylenediamine was cyclocondensed with Et (6-chloro-3-pyridyl)acetate and treated with fumaric acid to give I fumarate (A1 = H, A2 = 6-chloro-3-pyridylmethyl, X = CH:CH), which showed affinity with rat nicotinic acetylcholine .alpha.4.beta.2 receptor with Ki of 29 nM, vs. 1.6 nM, for nicotine. Pharmaceutical formulations contg. I are given.

# IT 371121-78-7P 371121-82-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

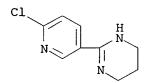
(prepn. of cyclic amidines as nicotinic acetylcholine .alpha.4.beta.2 receptor activators)

RN 371121-78-7 CAPLUS

CN Pyrimidine, 2-(6-chloro-3-pyridinyl)-1,4,5,6-tetrahydro-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 371121-77-6 CMF C9 H10 Cl N3



Elected openies.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 371121-82-3 CAPLUS

Pyrimidine, 2-(6-chloro-3-pyridinyl)-1,4,5,6-tetrahydro-1-methyl-, CN ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 371121-81-2 CMF C10 H12 Cl N3

2 CM

CRN 144-62-7 CMF C2 H2 O4

#### IT 371121-81-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(prepn. of cyclic amidines as nicotinic acetylcholine .alpha.4.beta.2 receptor activators)

RN

371121-81-2 CAPLUS
Pyrimidine, 2-(6-chloro-3-pyridinyl)-1,4,5,6-tetrahydro-1-methyl- (9CI) CN (CA INDEX NAME)

L8 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1997:417074 CAPLUS

DN 127:149117

TI Synthesis of 2-(2,6-dichloro-4-pyridyl)-3-propargyl-5-ethyl-6-methyl-4(3H)-pyrimidinone, a promising new herbicide

AU Taylor, Edward C.; Zhou, Ping; Tice, Colin M.; Lidert, Zev; Roemmele, Renee C.

CS Dep. Chemistry, Princeton Univ., Princeton, NJ, 08544, USA

SO Tetrahedron Letters (1997), 38(25), 4339-4342 CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier

DT Journal

LA English

OS CASREACT 127:149117

AB A novel synthesis of the title compd. I, a promising new herbicide, is reported which features regioselective carbon, followed by nitrogen, dialkylation of an intermediate dianion, and a tandem one-pot sequence of reactions involving sigmatropic sulfoxide elimination, LiCl-induced demethylation of a carbomethoxy grouping, decarboxylation, and isomerization/aromatization.

IT 193286-89-4P 193286-90-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate in prepn. of (dichloropyridyl)propargylethylmethylpyrimid inone)

RN 193286-89-4 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 2-(2,6-dichloro-4-pyridinyl)-5-ethyl-1,4,5,6-tetrahydro-6-oxo-4-[(phenylthio)methyl]-1-(2-propynyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{PhS-CH2} & \text{Cl} \\ \text{MeO-C} & \text{Cl} \\ \text{Et} & \text{N} & \text{N} \\ \text{HC} = \text{C-CH2} \end{array}$$

RN 193286-90-7 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 2-(2,6-dichloro-4-pyridinyl)-5-ethyl-1,4,5,6-tetrahydro-6-oxo-4-[(phenylsulfinyl)methyl]-1-(2-propynyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & & & \\
Ph-S-CH_2 & & & \\
O & & & \\
MeO-C & & & \\
Et & & & & \\
N & & & & \\
N & & & & \\
N & & & & \\
HC = C-CH_2 & & & \\
\end{array}$$

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L8 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2002 ACS
```

AN 1996:630487 CAPLUS

DN 125:275903

TI Preparation of 2-aryl-5,6-dihydropyrimidin-4-ones as herbicides

IN Tice, Colin Michael; Bryman, Lois Merle; Roemmele, Renee Caroline

PA Rohm and Haas Company, USA

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

ran.cni i							
		PA:	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
	PI	ΕP	733622	A1	19960925	EP 1996-301548	19960306
			R: DE, ES,	FR, GB	, IT		
		US	5629264	Α	19970513	US 1995-409293	19950323
		ΑU	9648005	A1	19961003	AU 1996-48005	19960312
		AU	710045	B2	19990909		
		CA	2171926	AA	19960924	CA 1996-2171926	19960315
		BR	9601059	Α	19980106	BR 1996-1059	19960320
		CN	1141292	A	19970129	CN 1996-103157	19960321
		JP	08283245	A2	19961029	JP 1996-91856	19960322
	PRAI	US	1995-409293		19950323		

OS MARPAT 125:275903

AB Title compds. [I; R = (hetero)aryl; R3 = (halo)alkenyl, alkoxyalkyl,cyanoalkyl, etc.; R5a,R5b = H, halo, alkyl, alkoxy, etc.; R6a,R6b = H, halo, alkyl, alkoxy, etc.; R5aR6a = (CH2)2-5; X = O or S] were prepd. Thus, 3-ClC6H4C(:NH)NH2 was cyclocondensed with F3CCH:CHCO2Et and the product N-alkylated with HC.tplbond.CCH2Br to give I (R = C6H4Cl-3, R3 = CH2C.tplbond.CH, R5a = R5b = R6b = H, R6a = CF3) which gave 90-100% control of 5 weeds at 1200g/ha preemergent.

# IT 182254-57-5P 182254-58-6P 182254-59-7P 182254-62-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation) of 2-aryl-5,6-dihydropyrimidin-4-ones as herbicides)

RN 182254-57-5 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 2-(2,6-dichloro-4-pyridinyl)-4,5-diethyl-1,4,5,6-tetrahydro-6-oxo-1-(2-propynyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & C1 \\
 & C1$$

RN 182254-58-6 CAPLUS

CN 4(3H)-Pyrimidinone, 2-(2,6-dichloro-4-pyridinyl)-5,6-diethyl-5,6-dihydro-3-(2-propynyl)- (9CI) (CA INDEX NAME)

Et 
$$C1$$
 $N$ 
 $N$ 
 $C1$ 
 $HC = C - CH_2$ 

RN 182254-59-7 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 2-(2,6-dichloro-4-pyridinyl)-4-ethyl-1,4,5,6-tetrahydro-6-oxo-1-(2-propynyl)-, methyl ester (9CI) (CA INDEX NAME)

MeO-C Et Cl N N Cl HC 
$$\subset$$
 C-CH2

RN 182254-62-2 CAPLUS

CN 4(3H)-Pyrimidinone, 2-(2,6-dichloro-4-pyridinyl)-6-ethyl-5,6-dihydro-3-(2-propynyl)- (9CI) (CA INDEX NAME)

```
ANSWER 6 OF 20 CAPLUS COPYRIGHT 2002 ACS
rs
     1996:625489 CAPLUS
AN
DN
     125:275528
ΤI
     Preparation of carbapenem compounds as antibacterials
IN
     Miwa, Tetsuo; Higuchi, Noriko; Soejima, Seizo; Okonogi, Kenji
PA
     Takeda Chemical Industries, Ltd., Japan
SO
     PCT Int. Appl., 152 pp.
     CODEN: PIXXD2
DΤ
     Patent
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                          _____
                     Al 19960906
     WO 9626939
PΙ
                                         WO 1996-JP509 19960301
         W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, KG,
             KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU,
             SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ,
             MD, RU
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
     AU 9648448
                      A1
                            19960918
                                           AU 1996-48448
                                                            19960301
     JP 09165388
                       A2
                            19970624
                                           JP 1996-44424
                                                            19960301
PRAI JP 1995-42765
                            19950302
     JP 1995-69343
                            19950328
     JP 1995-261371
                            19951009
     WO 1996-JP509
                            19960301
     MARPAT 125:275528
OS
     Carbapenem compds. I [R1 = (un)substituted lower alkyl group; R2 = H,
AB
     lower alkyl group; Y = bond, (un) substituted alkylene group; W = Q, Q1; A
     = (un)hydrogenated pyrimidine ring which may be substituted; X =
     (un) substituted hetero-atom; X may form a ring, taken together with the
     ring A-constituent nitrogen atom; X1 = 0, S; X2 = NH, O or S; ring A1 may
     be substituted, provided that, when X2 = NH, X1 = O; R2 = lower alkyl] or
     their esters or salts, useful as antibacterials, are prepd. Thus,
     5-(4-methoxybenzylthio)-2-(methylthio)-1,4,5,6-tetrahydropyrimidine was
     treated with CF3COOH-anisole and the resulting pyrimidinethiol was reacted
     with 4-nitrobenzyl (4R, 5R, 6S)-3-[(diphenylphosphono)oxy]-6-[(R)-1-
     hydroxyethyl]-4-methyl-7-oxo-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylate
     in MeCN contg. diisopropylethylamine to give the title compd.
     4-nitrobenzyl (4R,5R,6S)-3-[2-(methylthio)-1,4,5,6-tetrahydropyrimidin-5-
     ylthio]-6-[(R)-1-hydroxyethyl]-4-methyl-7-oxo-1-azabicyclo[3.2.0]hept-2-
     ene-2-carboxylate, which was sapond. with NaOH to give sodium
     (4R, 5S, 6S) - [(R) - 1 - hydroxyethyl] - 4 - methyl - 3 - [(2 - methylthio - 1, 4, 5, 6 - 1, 4, 5, 6]]
     tetrahydropyrimidin-5-yl)thio]-7-oxo-1-azabicyclo[3.2.0]hept-2-ene-2-
     carboxylate. In an in vitro study using Muller-Hinton agar medium, this
     had an IC50 of 0.05.times.106 CFU/mL against Escherichia coli vs.
     0.1.times.106 CFU/mL for Impenem.
     182203-13-0P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (prepn. of carbapenem compds. as antibacterials)
RN
     182203-13-0 CAPLUS
CN
     1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-4-
     methyl-7-oxo-3-[[1,4,5,6-tetrahydro-2-(2-pyridinyl)-5-pyrimidinyl]thio]-
```

(4-nitrophenyl) methyl ester (9CI) (CA INDEX NAME)

#### IT 182203-15-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of carbapenem compds. as antibacterials)

RN 182203-15-2 CAPLUS

CN 1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-4-methyl-7-oxo-3-[[1,4,5,6-tetrahydro-2-(2-pyridinyl)-5-pyrimidinyl]thio]-, monosodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{Me} \\ \text{Me-CH} & \text{S-N} & \text{N} \\ \text{O} & \text{CO}_2\text{H} & \text{H} \\ \end{array}$$

### Na

# IT 182204-23-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of carbapenem compds. as antibacterials)

RN 182204-23-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-5-[[(4-methoxyphenyl)methyl]thio]-2-(2-pyridinyl)- (9CI) (CA INDEX NAME)

MeO 
$$CH_2-S$$
  $N$   $N$   $H$ 

L8 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1991:632273 CAPLUS

DN 115:232273

TI Nitrogen-containing heterocyclic compounds and their optically active isomers

IN Matsumura, Koichi; Mano, Mitsuhiko; Nishimura, Tatsuo; Sugyama, Yoshio

PA Takeda Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	<del>-</del>				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 03086867	A2	19910411	JP 1990-168795	19900626
PRAT	TP 1989-163482		19890626		

AB Title compds. I or II (R1 = H, C1-18 alkyl, aryl, aralkyl, heterocyclic group; R2 = H, C1-8 alkyl; n = 0-3; R2 = C1-8 alkyl when n = 1 and R1 = H or Me) and their salts and optically active isomers, useful as intermediates for pharmaceuticals, agrochems., and liq. crystals, are prepd. Thus, refluxing Me propionimidate hydrochloride and 1,4-diaminobutyric acid in MeOH in the presence of NaOMe gave 90% 2-ethyl-1,4,5,6-tetrahydro-4-pyrimidinecarboxylic acid.

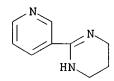
IT 137023-65-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, by condensation of diaminobutyric acid and imidate ester)

RN 137023-65-5 CAPLUS

CN 4-Pyrimidinecarboxylic acid, 1,4,5,6-tetrahydro-2-(2-pyridinyl)- (9CI) (CA INDEX NAME)

- L8 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2002 ACS
- AN 1988:32483 CAPLUS
- DN 108:32483
- TI Effects of nucleus basalis lesions on the muscarinic and nicotinic modulation of [3H]acetylcholine release in the rat cerebral cortex
- AU Meyer, Edwin M.; Arendash, Gary W.; Judkins, Jennifer H.; Ying, Lily; Wade, Cathy; Kem, William R.
- CS Sch. Med., Univ. Florida, Gainesville, FL, 32610, USA
- SO J. Neurochem. (1987), 49(6), 1758-62
  - CODEN: JONRA9; ISSN: 0022-3042
- DT Journal
- LA English
- Adult male rats received unilateral infusions of ibotenic acid (5 AB .mu.g/.mu.L) in the nucleus basalis magnocellularis (nbm). Two weeks later, cerebral cortical cholinergic markers (choline acetyltransferase activity, high-affinity choline uptake, and coupled acetylcholine (Ach) synthesis) were reduced in synaptosomes prepd. from the lesioned hemispheres compared to contralateral controls. The depolarizationinduced release of [3H]ACh from these synaptosomes was also reduced in the lesioned hemispheres, reflecting the reduced synthesis of transmitter. However, the nbm lesions had no effect on the inhibition of release induced by 100 .mu.M oxotremorine. Synaptosomal [3H]ACh release was not altered by nicotine or the nicotinic agonists anabaseine and 2-(3-pyridyl)-1,4,5,6-tetrahydropyrimidine. Nicotine (10-100 .mu.M) did increase [3H]ACh release in control and lesioned hemispheres in cortical minces, but to a similar extent. Apparently, neither muscarinic nor nicotinic receptors modulating ACh release reside on nbm-cholinergic terminals.
- IT 112147-36-1
  - RL: BIOL (Biological study)
    - (acetylcholine release response to, in brain cerebral cortex, nucleus basalis in relation to)
- RN 112147-36-1 CAPLUS
- CN Pyrimidine, 1,4,5,6-tetrahydro-2-(3-pyridinyl)- (9CI) (CA INDEX NAME)



Jame 18 #18

L8 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1983:463892 CAPLUS

DN 99:63892

TI Appraisals of compounds of diverse chemical classes for capacities to cure infections with sporozoites of Plasmodium cynomolgi

AU Schmidt, L. H.

CS South. Res. Inst., Kettering-Meyer Lab., Birmingham, AL, USA

SO Am. J. Trop. Med. Hyg. (1983), 32(2), 231-57

CODEN: AJTHAB; ISSN: 0002-9637

DT Journal

LA English

Compds. of widely diverse structures were appraised for radical curative AB activity in rhesus monkeys infected with sporozoites of the B strain of P. cynomolgi, using an evaluation system that provided a preliminary assessment with from 0.1-1.0 g of compd. and tests against 1 to 5 active infections. None of 32 compds. in a misc. structure category, none of 7 agents of antibiotic origin, none of twelve 1,5-naphthyridines, and none of seven 7-aminoquinolines exhibited curative activity at the largest test doses. One of 12 newly synthesized pyrocatechols appeared to have curative effect. Two of twenty 6-aminoquinolines showed curative effect at or near max. tolerated doses. In contrast, 90 of 174 8-aminoquinolines had curative effects, 18 of the 90 being as active as primaquine, 8 twice as active, and 6 four times as active. There were major disaggreements between the above results and those recorded by others in mice inoculated with sporozites of P. berghei or P. yoelii nigeriensis. These discrepancies were of serious dimensions in evaluations of the 8-aminoquinolines. This, plus previous near flawless performances of P. cynomolgi in identifying agents that would cure naturally acquired P. vivax infections, led to the suggestion that the abbreviated simian model employed in these studies be used hereafter in primary screening of new agents for radical curative activity.

IT 80061-38-7

RL: BIOL (Biological study)

(Plasmodium cynomolgi sporozoites infection therapy with)

RN 80061-38-7 CAPLUS

CN Pyrimidine, 5,5-bis[(3,4-dichlorophenyl)methyl]-1,4,5,6-tetrahydro-2-(4-pyridinyl)- (9CI) (CA INDEX NAME)

$$CH_2$$
 $CH_2$ 
 $C1$ 
 $C1$ 

L8 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1983:422491 CAPLUS

DN 99:22491

TI 1,4,5,6-Tetrahydropyrimidine derivatives

IN Gauthier, Jean A.; Jirkovsky, Ivo

PA Ayerst, McKenna and Harrison Ltd., Can.

SO U.S., 12 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4379926	Α	19830412	US 1978-904124	19780508

OS CASREACT 99:22491

Diphenylpyrimidines I (R = alkyl, Ph, 2-furyl, 3-pyridinyl, 2-thienyl, dialkylamino, ZR2; R2 = 1-piperidinyl, 4-morpholinyl; Z = alkylene) were prepd. by cyclization of PhNHCHPhCH2CH2COR (II). Thus, PhNHNH2 108.14, CH2O 30.03, and styrene 104.1 g were cyclocondensed to give 135.9 g 2,3-diphenylpyrazolidine. The latter compd. (133.9 g) was hydrogenated to give 48.4 g PhNHCHPhCH2CH2NH2, which (5.0 g) was benzoylated to give 2.0 g II (R = Ph). This (12.0 g) was cyclized with POCl3 to give 9.3 g I (R = Ph) (III). In rats, 6.25 mg III/kg orally was an effective diuretic.

IT 86203-86-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and diuretic activity of)

RN 86203-86-3 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,6-diphenyl-2-(3-pyridinyl)- (9CI) (CA INDEX NAME)

# IT 86203-87-4P

RN 86203-87-4 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,6-diphenyl-2-(3-pyridinyl)-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

- L8 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2002 ACS
- AN 1982:62629 CAPLUS
- DN 96:62629
- TI New tissue schizontocidal antimalarial drugs
- AU Davidson, David E., Jr.; Ager, Arba L.; Brown, John L.; Chapple, Frank E.; Whitmire, Richard E.; Rossan, Richard N.
- CS Dep. Parasitol., Walter Reed Army Inst. Res., Washington, DC, 20012, USA
- SO Bull. W. H. O. (1981), 59(3), 463-79 CODEN: BWHOA6; ISSN: 0366-4996
- DT Journal
- LA English
- AB Over 700 causal prophylactic and radical curative antimalarial drugs have been discovered during the screening of approx. 4000 chem. compds. in rodent and simian malaria models. Causal prophylactic activity in the Plasmodium berghei-rodent model was demonstrated by 10 distinct groups of chems.: 1) tetrahydrofolate dehydrogenase inhibitors, 2) naphthoguinones, dihydroacridinediones, 4) tetrahydrofurans, 5) quanylhydrazones, 6) clopidol analogs, 7) quinoline esters, 8) dibenzyltetrahydropyrimidines, 9) 6-aminoquinolines, 10) 8-aminoquinolines. Of the causal prophylactic compds., only the 6- and 8-aminoquinolines were capable of curing persistent exoerythrocytic infections of P. cynomolgi in rhesus monkeys. The 6-aminoquinolines were substantially less active than primaguine. A series of 4-methyl-5-phenoxy-6-methoxy-8-aminoquinolines I (R = F, Cl, OMe, CF3) were potent blood schizontocides and radical curative drugs. The most active member of this series WR 225448 (I succinate salt, R =CF3) [80065-56-1], was 5 times more active than primaquine in curing persistent exoerythrocytic infections of P. cynomolgi in rhesus monkeys. As a blood schizontocide, WR 225448 was effective in animal models against P. berghei, P. cynomolgi, P. vivax, and both drug-sensitive and drug-resistant strains of P. falciparum. WR 225448 was also more toxic than primaquine in rats during subacute (28-day) administration.
- IT 80061-38-7

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimalarial activity of)

- RN 80061-38-7 CAPLUS
- CN Pyrimidine, 5,5-bis[(3,4-dichlorophenyl)methyl]-1,4,5,6-tetrahydro-2-(4-pyridinyl)- (9CI) (CA INDEX NAME)

Same of 10

```
ANSWER 14 OF 20 CAPLUS COPYRIGHT 2002 ACS
L8
     1981:103366 CAPLUS
AN
DN
     94:103366
TΙ
     Urea and amido compounds
     Marxer, Adrian
IN
     Ciba-Geigy A.-G., Switz.
PA
SO
     S. African, 34 pp.
     CODEN: SFXXAB
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
                                           ZA 1979-1062 19790307
CA 1979-321545 19790215
      _____
     ZA 7901062 A 19800326
CA 1125759 A1 19820615
US 4292429 A 19810929
FI 7900740 A 19790909
FI 70708 B 19860626
FI 70708 C 19861006
EP 4561 A2 19791017
EP 4561 B1 19811104
EP 4561 A3 19791114
                                            US 1979-14661
                                                               19790223
                                            FI 1979-740
                                                               19790305
                                            EP 1979-100647 19790305
R: BE, CH, DE, FR, GB, IT, LU, NL, SE
     US 1979-14661
                             19790223
     CS 1979-1460
                             19790305
     AT 1979-1710
                             19790307
     The antitumor (no data) compds. I (R = aryl, arylamino, aralkyl,
AΒ
     arylaminoalkyl; R1 = aryl, arylamino; X = O, S; X1 = alkylene n = 1, 2)
     were prepd. Thus, 2,6-Cl2C6H3NHCH2CN was treated with HN(CH2CH2NH2)2 to
     give II (R2 = H), which was treated with 4-MeC6H4NCO to give II (R2 = H)
     CONHC6H4Me-4).
IT
     73998-75-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
```

(prepn. and reaction of, with isocyanates)

1(4H)-Pyrimidinepropanamine, 5,6-dihydro-2-(4-pyridinyl)- (9CI) (CA INDEX RNCNNAME)

 $(CH_2)3-NH_2$ 

IT

RL: SPN (Synthetic preparation); PREP (Preparation) 73998-73-9P 76692-14-3P

Benzoic acid, 4-[[[[3-[5,6-dihydro-2-(4-pyridinyl)-1(4H)pyrimidinyl]propyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME) 73998-73-9 CAPLUS RNCN

(CH<sub>2</sub>) 3-NH-C-NH-

RN

Benzoic acid, 4-[[[[3-[5,6-dihydro-2-(4-pyridinyl)-1(4H)pyrimidinyl]propyl]amino]carbonyl]amino]-, monohydrochloride (9CI) (CA CNINDEX NAME)

● HCl

- L8 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2002 ACS
- AN 1980:446666 CAPLUS
- DN 93:46666
- TI Process for the preparation of novel imidazole urea and amido compounds
- IN Marxer, Adrian
- PA Ciba-Geigy A.-G., Switz.
- SO Brit. UK Pat. Appl., 14 pp. CODEN: BAXXDU
- DT Patent
- LA English
- FAN.CNT 2

	PA:	rent no.	KIND	DATE		API	PLICATION NO.	DATE
PI		2016011	Α	19790919		GB	1979-8098	19790307
	GB	2016011	B2	19820825				
		1125759	A1	19820615			1979-321545	19790215
		4292429	Α	19810929		US	1979-14661	19790223
	FI	7900740	Α	19790909		FI	1979-740	19790305
		70708	В	19860626				
	FI	70708	С	19861006				
	EP	4561	A2	19791017		EP	1979-100647	19790305
	EP	4561	B1	19811104				
	EP	4561	A3	19791114				
			DE, FR	, GB, IT,	LU,	NL, S	SE	
	CS	244656	В2	19860814			1979-1460	19790305
	ES	478342	A1	19790516		ES	1979-478342	19790306
		142336	С	19800618		DD	1979-211405	19790306
	PL	116762	B1	19810630		PL	1979-213924	19790306
	PL	123150	B1	19820930		$\mathtt{PL}$	1979-221681	19790306
	IL	56797	A1	19820930		${ t IL}$	1979-56797	19790306
	DK	7900952	Α	19790909		DK	1979-952	19790307
		7900765	Α	19790911		NO	1979-765	19790307
		152606	В	19850715				
		152606	С	19851023				
		7944900	A1	19790913		AU	1979-44900	19790307
		531006	B2	19830804				
		7901710	Α	19810315		AT	1979-1710	19790307
		364375	В	19811012				
		845779	A3	19810707			1979-2733999	19790307
		25271	0	19830628		HU	1979-CI1920	19790307
		182940	В	19840328				
		54125668	A2	19790929		JP	1979-26245	19790308
		62009109	B4	19870226				
		923367	<b>A</b> 3	19820423			1980-2872253	19800118
		8003951	А	19810515		ΤA	1980-3951	19800730
		365179	В	19811228				
		4420619	Α	19831213			1981-247427	19810325
		244700	B2	19860814		CS	1984-8407	19841105
PRAI		1978-2519		19780308				
	ΠC	1979-14661		19790223				
	CS	1979-1460 1979-1710		19790305 19790307				

AB Ureas and amides I (R, R2 = monocyclic, carbocyclic aryl or heteroaryl; R1 = H, alkyl; n = 0, 1; m = 0, 1, 2; x = 1, 2; Z = alkylene having 2-3 C atoms in the linear chain; Z1 = O, S; Z2 = imino, bond) and I salts were prepd. E.g., 1-[2-[2-(2,6-dichloroanilinomethyl)-2-imidazolin-1-yl]ethyl]-3-(p-tolyl)urea was prepd. by stirring 1-aminoethyl-2-(2,6-dichloroanilinomethyl)-2-imidazoline with p-MeC6H4NCO in PhMe at

90.degree. for 3 h. I have a powerful action against tumors; their activities were assessed against respiratory carcinomas in golden hamsters and the Ehrlich ascites carcinoma in mice. They are particularly valuable for the treatment of bronchial carcinomas. Compns. contg. I are described.

IT 73998-75-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and addn. reaction of, with aryl isocyanate)

RN 73998-75-1 CAPLUS

CN 1(4H)-Pyrimidinepropanamine, 5,6-dihydro-2-(4-pyridinyl)- (9CI) (CA INDEX NAME)

IT 73998-73-9P 73998-74-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as neoplasm inhibitor)

RN 73998-73-9 CAPLUS

CN Benzoic acid, 4-[[[[3-[5,6-dihydro-2-(4-pyridinyl)-1(4H)-pyrimidinyl]propyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 73998-74-0 CAPLUS

CN Benzoic acid, 4-[[[[3-[5,6-dihydro-2-(4-pyridinyl)-1(4H)-pyrimidinyl]propyl]amino]carbonyl]amino]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

ANSWER 19 OF 20 CAPLUS COPYRIGHT 2002 ACS L8

1972:429705 CAPLUS ΑN

77:29705 ·DN

Actions of some muscarinic and nicotinic agonists on the Retzius cells of ΤI the leech

Woodruff, Geoffrey N.; Walker, Robert James; Newton, Lynne C. ΑU

Dep. Physiol. Biochem., Univ. Southampton, Southampton, Engl. CS

Comp. Gen. Pharmacol. (1971), 2(5), 106-17 SO CODEN: CPGPAY

Journal DT

English LΑ

Twenty-eight acetylcholine analogs, nicotinic and muscarinic agonists, and AΒ acetylenic compds. were tested on Retzius cells of the leech (Hirudo medicinalis) nerve cord. Generally the acetylcholine analogs and nicotinic agonists were powerful stimulants, causing depolarization with an increase in the rate of firing of action potentials, whereas the muscarcinic agonists usually caused hyperpolarization and inhibition of neurons when added in threshold amts. and excitation when added in relatively large amts. Carbachol [51-83-2] and 2-(3-pyridyl)-1,4,5,6tetrahydropyrimidine-HCl (I) [35059-05-3] were the most potent stimulants, and [4-(m-chlorophenylcarbamoyloxy)-2butynyl]trimethylammonium chloride (II) [55-45-8] was the most potent inhibitor.

IT 35059-05-3

RL: PRP (Properties)

(nerve Retzius cell of leech in response to)

RN

35059-05-3 CAPLUS
Pyrimidine, 1,4,5,6-tetrahydro-2-(3-pyridinyl)-, monohydrochloride (9CI) CN (CA INDEX NAME)

HCl

L8 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1970:425515 CAPLUS

DN 73:25515

TI Tetrahydropyrimidines active against protozoa

PA Farbwerke Hoechst A.-G.

SO Fr. Demande, 20 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI FR 2007450	A1	19700109	FR 1969-11419	19690414	
PRAI DE 1967-1770208		19680413			

AB I (R = 4-pyridyl, 4-sulfamoylphenyl, 4-nitrophenyl, 3-pyridyl, 3-chloro-4nitrophenyl, 4-cyanophenyl, or a similar group; R1 = 3,4-dichlorobenzyl or 2,4-dichlorobenzyl), and their HCl, maleate, and oxalate salts, are prepd. The compds. exhibit mild activity against protozoa such as Plasmodium berghei and Babesia rodhaini. The compds. are prepd., for example, by the treatment of compds. such as 2,2-bis(3,4-dichlorobenzyl)-1,3-diaminopropane with isonicotinic acid or a similar compd. in aq. HCl.

IT 27337-17-3P 27337-19-5P 27338-48-3P

RN 27337-17-3 CAPLUS

CN Pyrimidine, 5,5-bis(3,4-dichlorobenzyl)-1,4,5,6-tetrahydro-2-(4-pyridyl)-, dihydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

# ●2 HCl

RN 27337-19-5 CAPLUS

CN Pyrimidine, 5,5-bis(3,4-dichlorobenzyl)-1,4,5,6-tetrahydro-2-(3-pyridyl)-, dihydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & & \\ \hline & N & \\ & CH_2 & \\ \hline & C1 & \\ \hline & C1 & \\ \hline \end{array}$$

•2 HCl

RN 27338-48-3 CAPLUS

CN Pyrimidine, 5,5-bis(3,4-dichlorobenzyl)-1,4,5,6-tetrahydro-2-(2-pyridyl)-, hydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & N \\ \hline & HN & CH_2 \\ \hline & C1 & C1 \\ \hline & C1 & \\ \end{array}$$

●x HCl

#### => d his

(FILE 'HOME' ENTERED AT 11:39:29 ON 24 SEP 2002)

FILE	'REGISTRY'	ENTERED	ΑT	11:39:34	ON	24	SEP	2002
FILE	'REGISTRY'	ENTERED	AΤ	11:39:34	ON	24	SEP	2002

L1 STRUCTURE UPLOADED

L2 10 S L1 SSS SAM

STRUCTURE UPLOADED L3

L4 0 S L3 SSS SAM

L5 STRUCTURE UPLOADED

L6 0 S L5 SSS SAM

49 S L5 SSS FUL L7

FILE 'CAPLUS' ENTERED AT 11:42:43 ON 24 SEP 2002

L8 20 S L7

FILE 'CAOLD' ENTERED AT 11:43:39 ON 24 SEP 2002

=> s 17

L9 0 L7

=> log y

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 0.38 230.96 FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

ENTRY

ENTRY SESSION -12.39 CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 11:43:53 ON 24 SEP 2002